TREE WILLOWS AT FORT KENT, MAINE.

EMILE F. WILLIAMS.

THE St. John river, where it forms the northernmost boundary of Maine between St. Francis and Hamlin, has already been most prolific in botanical rarities, but that its resources are by no means exhausted was demonstrated very forcibly during the short botanical trip made there last August by Dr. B. L. Robinson, Mr. M. L. Fernald and myself. Many most interesting plants were collected and these will be noticed in due time in this journal, but I wish in this instance to call attention to some remarkable willows which we found growing in a hillside bog at Fort Kent.

Salix discolor assumed here the habit and proportions of a fair sized tree. The trunk of one specimen measured forty-three inches in circumference at two feet from the ground. *S. balsamifera*, which I believe has always been considered a shrub, here attained a diameter of fourteen inches at two feet from the base. Like *S. discolor* it assumed a tree-like habit and both these species were represented by specimens not less than twenty to twenty-five feet high. Another willow proves to be of more than usual interest. I collected specimens from a tree measuring seventeen inches in circumference at two feet from the ground and not less than twenty-five feet high on July 22nd, 1900, with Mr. J. Franklin Collins of Brown University. We referred these last winter to *S. pentandra* of Europe and northern Asia, but rather doubtfully as the station where they were collected hardly seemed likely to harbor introduced species. We paid a visit to these trees on August 10th, 1901, and collected more material which has been critically examined by Mr. Fernald, who pronounces it to be *S. lucida*, Muhl., var. *macrophylla*, Andersson.

Andersson described this variety in his monograph of Salix (DC., Prodromus, XVI, Part 2, 205) from a specimen of Lyall's, collected in 1859 on the Frazer river (British Columbia) and from a specimen of Bourgeau's from Rio River (presumably in the Saskatchewan country). Fortunately there is a good full specimen of Lyall's in the Gray Herbarium and it matches exactly our material.

The important characters separating it from the ordinary *S. lucida*, in which the leaves when mature are quite glabrous, are the closely pubescent branchlets with an only occasional tendency to become

smooth and the very large taper-pointed leaves with the midrib pubescent both above and below, usually densely so even in late summer. Many leaves in my specimens are over six inches long.

Thus one more high northern plant is added to the Flora of the United States by its occurrence in the valley of the St. John river within our border.

BOSTON, MASSACHUSETTS.

A NEW STATION FOR LACTUCA MORSSII. — Among a number of specimens of *Lactuca leucophaea*, Gray, which I collected in Middleboro, Mass., on Aug. 18, 1901, there was one which, on examination, proved to have fruit unlike that of the others. This specimen has been identified at the Gray Herbarium as *L. Morssii*, Robinson. The plants came from a rather low place by the roadside, near a brook. Except for the fruit, there was no apparent difference between the species. This station extends the range of *L. Morssii* by about twenty miles, and is at least ten miles from the nearest salt water. — JOHN MURDOCH, JR., Roxbury, Massachusetts.

THE TRUE LYCOPODIUM COMPLANATUM AND ITS COMMON AMERICAN REPRESENTATIVE.

M. L. FERNALD.

IN August, 1901, while studying the forms of *Lycopodium sabinaefolium* and *sitchense* on a northern hillside at Fort Kent, Maine, Mr. E. F. Williams called the attention of Dr. B. L. Robinson and the writer to a peculiar coarse plant with more or less glaucous branches. This plant which at first sight suggested a large glaucous form of *L. sabinaefolium* was seen upon examination to differ strikingly from that species in its broad branches with flat under surface. In this character the plant was like the common *L. complanatum* of the Eastern States. But unlike the well-known eastern *L. complanatum*, which occurred near by, the coarser glaucous plant quite lacked the compact fan-like habit of the sterile branches, while the longer loosely ascending branches were less forked, and the shorter mostly simple peduncles bore solitary simple or slightly forked strobiles